

Recent Oil Transfer Spills - Mobile (Tank Truck) to Vessel Oil Transfers



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- Three case studies for how the State & Federal regulations are applied
- Investigations on some of these are still on-going



M/V ABSINTHE

201' Luxury Yacht, \$23,000/Week



M/V ABSINTHE

- 201' Yacht
- Transfer occurred at dock in Anacortes (frequent location of mobile transfers)
- Total fuel capacity is 120 tonnes (37,000 US Gallons), federally regulated
- Four (4) fuel tanks (plus one for Jet fuel)

M/V ABSINTHE

- DOI was completed
- Radio and verbal/hand communications utilized during transfer
- Flow rate of transfer was ~120 GPM
- Fuel ordered was for 16,000 gallons but received only 7,500 gallons

M/V ABSINTHE

- RP and mobile facility reported spill to NRC and EMD
- Initially reported as a five (5) gallon spill
- Spill later estimated as one (1) gallon to deck with "spray" to water
- Internal valve failure (external valve had been shut but crossover to a full tank)

M/V ABSINTHE

- Pads and boom on deck but scuppers not effectively blocked
- Drums/buckets staged under vents of tanks being filled
- No buckets under other vents
- Tank being filled did not spill

M/V ABSINTHE

- Six (6) crew members involved in transfer
- Immediate response to spill
- Tanks dipped/gauged during transfer
- Person located at pipe fill
- Other watches in place

F/V ST. DOMINICK

- Spill location Anacortes
- 50' Fishing vessel, 94 gross tons (below State limits)
- Total fuel capacity 9,500 gallons (<Federal limits)
- 10 Fuel tanks

F/V ST. DOMINICK

- No DOI completed and not required
- Verbal/hand communications utilized during transfer
- Pump rate 50 GPM with 1,500 gallons ordered

F/V ST. DOMINICK

- Spill reported by mobile facility to NRC – not reported to EMD
- Initial spill reported as five (5) gallons diesel
- Later estimated as 5-6 gallons spilled
- Reportedly a valve was left open

F/V ST. DOMINICK

- Spill went into bilge or into a full tank
- Bilge pumped diesel off vessel or spill came out vent from overfill
- Driver noted sheen in water
- Deckhand fueling at fill port, owner inside

F/V ST. DOMINICK

- Reportedly vessel has spilled twice out of last 6 transfers (over about one year)
- No WDOE history for vessel
- Scuppers covered but not plugged
- RP Responded with boom and pads
- Pads on-board prior to transfer

ISLAND SPIRIT

- 75' Tug
- 90 Gross tons (<300 GT State regulation)
- 11 Fuel tanks on-board
- Total fuel capacity 40,900 gallons
(>10,500 gallons capacity, vessel subject to Federal regulation)

Tug – ISLAND SPIRIT



ISLAND SPIRIT

- Frequent transfer location at home pier in Seattle
- USCG and Seattle FD notified of a transfer
- Another vessel identified for transfer
- DOI completed
- Verbal and hand communications used
- Not pre-boomed

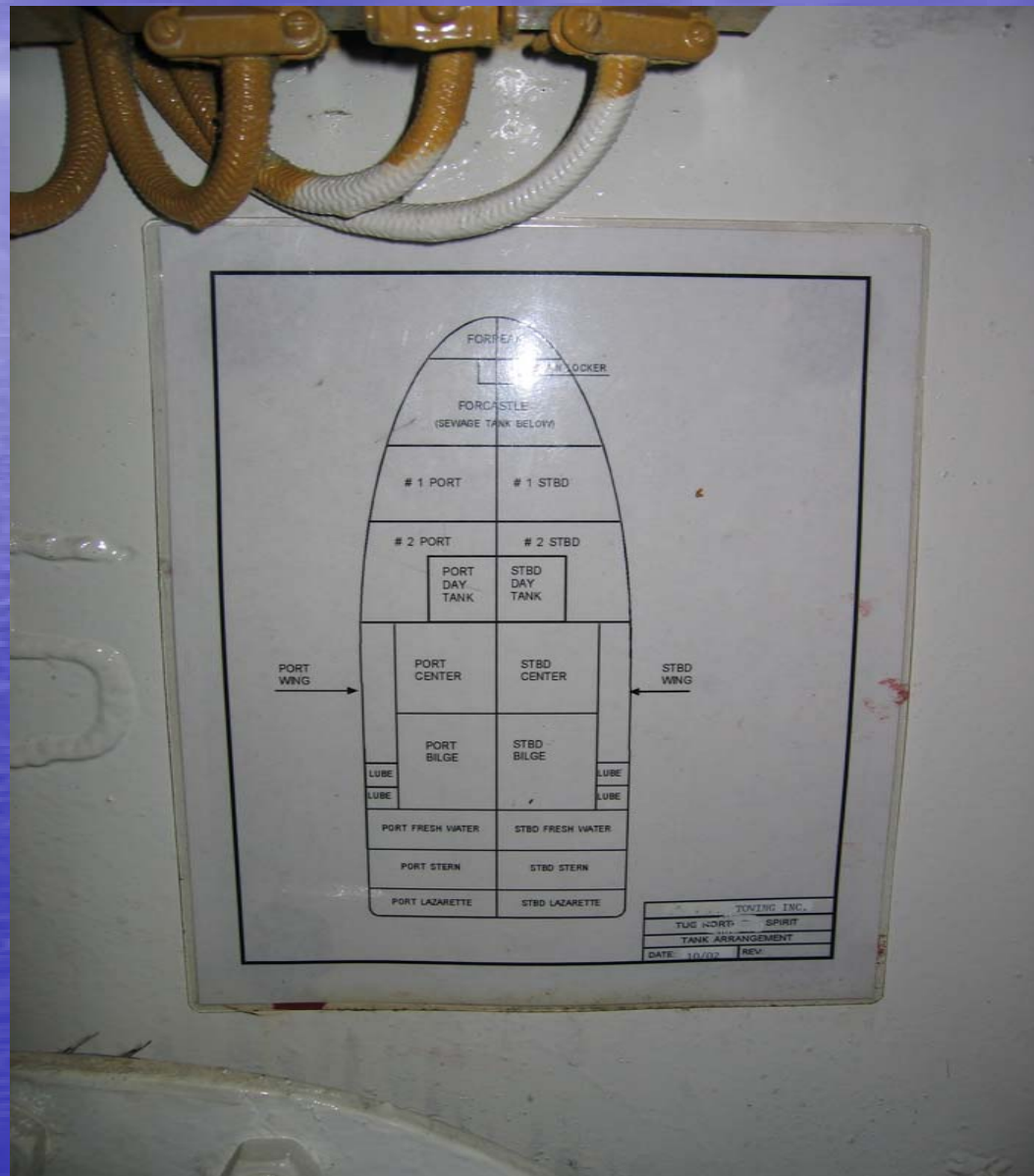
Island Spirit



ISLAND SPIRIT

- Two (2) tank truck/trailers for an order of 24,000 gallons of diesel. Vessel filling multiple tanks
- Flow rate reported 80-120 GPM pumped through a 3 inch hose with Cam-Lock couplings

ISLAND SPIRIT



Island Spirit



ISLAND SPIRIT



ISLAND SPIRIT



ISLAND SPIRIT

- Double bottom tanks not sounded after completion
- Watched sight glass to monitor wing tanks
- Watch at vent shouted to mobile to alert him to spill
- Reportedly ~15-30 seconds to shut down
- Notification to NRC and EMD by vessel

ISLAND SPIRIT



ISLAND SPIRIT



ISLAND SPIRIT

- 7,000 gal had been delivered before the spill
- Spilled through vent onto deck into water
- Overfill went to 5 gal bag, not fixed containment (1 bbl minimum for vessel over 300 GT)
- Spill initially reported as two (2) gallon diesel, later estimated at 20 gallons

ISLAND SPIRIT

Spill Volume Estimate



ISLAND SPIRIT

Spill Volume Estimate



ISLAND SPIRIT

Spill Volume Estimate

- Flow Rate/Valve positioning
- Weight of bags containing sorbents
- Recovery estimate (~0.25 gallons/pad)
- Hydrophobic (white) pads/boom/sweep
- Interviews during investigation

FINDINGS

- Notifications: F/V did not report
- Cleanup: Boats, boom & sorbents (training?)
- Initial spill volume – Often under reported (hard to determine by looking)
- Scuppers - Should be mechanically plugged and not just covered with sausage boom

FINDINGS

- Sound tanks
- Watch all sight glasses during fueling
- Check and recheck valves
- Stage spill response supplies

QUESTIONS/COMMENTS

